

## Die Kniebeuge

### **Ist die tiefe Kniebeuge wirklich "schlecht für's Knie"?**

Die Kniebeuge gilt als "Königsübung" des Krafttrainings, und das zurecht. Mit dieser komplexen Grundübung werden alle Muskeln gekräftigt, die den Menschen zum Homo erectus machen und für seine Statik beim Stehen und Gehen verantwortlich sind.

Da ein effizientes Krafttraining nicht nur, wie es im Bodybuilding der Fall ist, Muskeln, sondern Bewegungen trainiert, ist es verständlich, dass es dafür nicht nur einen einzigen Muskel, sondern mehrere Muskeln braucht, die an einer Bewegung beteiligt sind. Man nennt das "Muskelkette" oder "Muskelschlinge". Im Falle der Kniebeuge besteht sie aus dem Oberschenkelstrecker (aber auch -beuger), dem großen Gesäßmuskel (Musculus gluteus maximus), der als Hüftstrecker wirkt, sowie dem Rückenstrecker (Musculus erector spinae = autochthone Rückenmuskulatur).

Immer wieder hört und liest man, dass man die Kniebeuge nur bis zu einem rechten Winkel im Kniegelenk machen dürfe und auf keinen Fall tiefer, weil das "schlecht" für's Kniegelenk sei. Die meisten Trainer, Mediziner und Sportwissenschaftler weisen immer wieder darauf hin. Aber stimmt das auch? Tut es nicht! Dagegen spricht nicht nur die Empirie im Kraftsport (Gewichtheben, Powerlifting), sondern auch die Biomechanik.

Das Gegenteil ist der Fall: **Die 90°-Kniebeuge ist für das Kniegelenk belastender als die tiefe Kniebeuge, sprich der klassische "Squat"**. Wenn die Beugung bei einem Kniewinkel von 90° abgebremsst wird, wirken höhere Scherkräfte auf das Gelenk als bei einer Fortsetzung der Bewegung in die "Hocke".

[Anmerkung: Wobei die tiefe Kniebeuge keine eigentliche Hocke ist, da ja in diesem Fall durch Anspannen der autochthonen Rückenmuskulatur (Musculus erector spinae, "Rückenstrecker") der Rücken bewusst lordosiert und damit wie ein Bogen gespannt wird. Außerdem wird das Gesäß nicht nur nach unten, sondern auch nach hinten bewegt und damit der Druck auf das Kniegelenk verringert (siehe unten). Ansonst ist zu sagen, dass ein "Hinhocken" eine ganz natürliche Bewegung ist (siehe Kinder oder Naturvölker wie z.B. Indonesier, die oft stundenlang irgendwo hocken), die dem (nicht vorgeschädigten) Kniegelenk nicht schadet.]

**Beim rechten Winkel im Kniegelenk, also beim rechten Winkel zwischen Ober- und Unterschenkel, hat der Lasthebel (Oberschenkel) mit dem Widerstand (Körpergewicht plus Hantelgewicht) den größten Abstand zum Drehpunkt (Kniegelenk) und dadurch das größte Drehmoment.** In dieser Position besteht die größte Kniebelastung, v.a. beim Strecken des Beins aus dieser Position heraus, sprich bei der Aufwärtsbewegung (also beim Aufrichten).

Wenn man aber von einer tieferen Position heraus drückt, wird der "kritische" 90°-Winkel quasi "im Vorbeigehen" passiert, und damit das Kniegelenk, sprich in erster Linie der Gelenksknorpel, aber auch die Menisci und das vordere Kreuzband, weniger druck- bzw. zugbelastet.

Darauf ist auch bei den sog. Box-squats (siehe unten) zu achten - man darf also nicht den Fehler machen, eine zu hohe Box oder Bank zu wählen, die nur eine 90°-Beugung ermöglicht. Wenn bei rechtwinkeligem Kniegelenk aus dem "oberschenkelentspannten" Sitzen heraus gedrückt wird, kommt es zu einer kurzen, aber hohen initialen Kniebelastung.

Dass zudem die Belastung des Kniegelenks relativ gering gehalten werden kann, wenn man die Unterschenkel während des gesamten Bewegungsausführung möglichst senkrecht stehen lässt, also die Knie nie über die Fußspitze ragen, indem man bei der Abwärtsbewegung mit dem Gesäß nicht nur nach unten, sondern auch bewusst möglichst weit nach hinten geht, ist ein weiterer wichtiger Aspekt.

Die beste Methode, die tiefe Kniebeuge zu erlernen, ist die "Boxbeuge" (box squat). Dabei setzt man sich auf eine Kiste oder flache Bank, indem man das Gesäß bewusst so weit nach hinten führt, dass die Unterschenkel senkrecht stehen bleiben. Während die Bogenspannung im Rücken immer aufrecht erhalten wird, baut man nach dem Hinsetzen die Muskelspannung in Gesäß und Oberschenkel neu auf und steht möglichst explosiv auf.

**Hier die Punkte, die bei der Ausführung der Kniebeuge zu beachten sind:**

- **Stand etwas mehr als schulterbreit, der Körperschwerpunkt ruht auf der ganzen Fußsohle (nie auf dem Vorfuß, eher sogar mehr auf der Ferse), "Knickfuß" (Pronation) vermeiden**
- **die Fußspitzen zeigen in die gleiche Richtung wie die Knie**
- **der Blick ist geradeaus gerichtet**
- **die Hantelstange liegt nicht auf dem 7. Halswirbel, sondern darunter auf dem Trapezius (Kapuzenmuskel)**
- **LWS-Lordosierung (ein "Hohlkreuz" ist hier erwünscht → "Stockerlpopo"), ganzer Rücken immer in "Bogenspannung", auch der Bauch wird angespannt**
- **die Abwärtsbewegung wird mit dem Gesäß (nicht mit dem Kopf!) eingeleitet, das nicht nur nach unten, sondern auch bewusst nach hinten (!) geführt wird**
- **die Unterschenkel bleiben damit so senkrecht wie möglich (die Knie sollen nie über die Fußspitze ragen)**
- **die Knie werden bewusst nach außen gedrückt (sie bleiben immer über den Füßen, Valgusstellung = "X-Beine" vermeiden)**
- **die Beugung erfolgt so weit, bis das Hüftgelenk etwas tiefer als das Kniegelenk ist (Oberschenkel sollen zumindest horizontal sein)**
- **die Neigung des Oberkörpers (je nach Widerstand = Hantelgewicht) stabilisiert den Körperschwerpunkt (verhindert ein "Umkippen" nach hinten)**
- **die Aufwärtsbewegung wird mit dem Kopf (nicht mit dem Gesäß!) nach oben eingeleitet**

siehe auch [Funktionelles Krafttraining](#)

**Links:**

[www.myhousesigns.com/documents/Teaching\\_the\\_squat.htm](http://www.myhousesigns.com/documents/Teaching_the_squat.htm)

[www.elitefts.com/documents/Seminar\\_squats.htm](http://www.elitefts.com/documents/Seminar_squats.htm)

[www.bodybuilding.com/fun/elitefts2.htm](http://www.bodybuilding.com/fun/elitefts2.htm)

[www.elitefts.com/documents/to\\_the\\_critics.htm](http://www.elitefts.com/documents/to_the_critics.htm)

[www.sportverein-fellbach.de/KDK/disziplinen/Kniebeuge/kniebeuge.htm](http://www.sportverein-fellbach.de/KDK/disziplinen/Kniebeuge/kniebeuge.htm)

[www.deepsquatter.com/strength/archives/ls9.htm](http://www.deepsquatter.com/strength/archives/ls9.htm)

[www.k3k.de/Training/Box1/box1.html](http://www.k3k.de/Training/Box1/box1.html)

[www.weightliftingdiscussion.com/boxsquat.html](http://www.weightliftingdiscussion.com/boxsquat.html)

[www.powerlifting-ipf.com/Powerlifting%20Injury%20Study.pdf](http://www.powerlifting-ipf.com/Powerlifting%20Injury%20Study.pdf)

<http://homepages.uni-regensburg.de/~lea22257/biomechanik/Kniebeuge.pdf>

**Weiterführende Literatur:**

**Teaching the Squat**

by Jim Wendler

[www.myhousesigns.com/documents/Teaching\\_the\\_squat.htm](http://www.myhousesigns.com/documents/Teaching_the_squat.htm)

1. Get into an athletic stance: For most people this is very easy. Most have played a sport and almost every sport position is the same. If you played volleyball, get into a position as if you were ready to receive a serve. If you played baseball or softball, get into the same stance as you would as a shortstop. If you played football, the stance of a middle linebacker will suffice. All of these positions are the same; butt and hips are pushed slightly back, knees are bent, lower back is arched, head is up, weight is evenly distributed on the feet, upper back is pulled together, toes are slightly pointed out and the mid-section is tight. Notice that each of these positions are slightly wider than shoulder width; if you are any narrower in any of these sports than you will compromise lateral speed and will be pushed over. Also, I hope that I played against you as were surely on your ass and back most of the game.

2. From this position, place your weight on your toes, pivot on them and move your heels out. After this, redistribute your weight on your heels, pivot on your heels and turn your toes back to the original angle. If you have any rhythm at all then this will look similar to a dance move. This will take your stance a bit wider than normal and put you into an ideal squat position. With some experimentation, you will find that you may have to go back to the original stance or even go wider; whatever the case begin with this and experiment. Everyone will have a slightly different stance.

3. Place your hands on your thighs and side them down to just above your knees. This position should be the same as if you were taking a breather between wind-sprints or something similar. This is a very basic position. No one takes a breather between sprints or in a basketball game with their weight on their toes. They will grab their shorts, push their glutes back, rest their upper body on their hands and drop their head. Sound familiar? If you have any trouble picturing this position then take a look at football players in a huddle or a basketball player during free-throws. They look almost the same. From this position, simply raise your head, arch your upper and lower back and place your hands as if they were on a barbell. This is the exact position you want to be in when you perform a squat.

4. At this point, your hips and glutes should be pushed back, your lower and upper back is arched, head straight ahead, bodyweight on your heels and your mid-section is held tight. If you are not in this position, repeat the first 3 steps and make sure you are in this position.

5. Begin your squat descent by leading your body down with your hips and glutes. Maintain the arch in your lower and upper back. If you are having a problem sitting back into the squat, you may have to lean your forward. This is not dangerous as long as you keep your upper and lower back arched. About 60-70% of the weight should be distributed on your heels.

6. When you are about half way down, begin pushing your knees out and opening up your groin. This is what has been called "spreading the floor" but I have found that the term "open your groin" or "show your groin" or "open the knees" to be better terms when teaching people how to squat. Also, by pushing your knees out and opening your groin, you will have an easier time reaching parallel and will reach it quicker. Now the weight will be shifted to your heels and the sides of your feet.

7. For many people, once they sit back into the squat and open the hips, at this point they can simply squat down. Once your body is in perfect position, opening the hips will allow them to hit parallel without pushing back. This may be difficult to see when you read this, but try it out on a box with someone watching your knees. If you do it correctly then your knees will not move (they will remain over your ankles) when you squat down. The key is learning how and when to open you groin. This will take practice and some more practice; this is something that you will not get correct after a few tries, so be patient.

8. Hip flexibility and mobility is one key in squatting correctly, so this may be your limiting factor. If you are having problems with hip flexibility and mobility I highly recommend getting the Parisi Warm up Method on DVD or VHS. This video highlights many of the hip mobility and flexibility exercises that will prepare you for squatting correctly. Also, it is a great for conditioning and overall body preparation. This video/DVD can be found at EliteFTS.com.

Now let's say that even these 8 steps are too confusing for your athletes or too much to consider. What I have found is that there are three definitive things that will help your squat. If you concentrate on these three things, or emphasize them over and over again to your athletes, I guarantee that they will become better squatters. If you are a coach do not make things more complicated than they have to be. Simplify everything and you will be surprised at how much better your athletes will lift. Have the athlete get into whatever stance they are comfortable in. Unless they are much too wide or their heels are touching, don't fight it. Just let them be comfortable.

1. Squeeze the bar.

While you are sitting at your computer, drop your hands down at your sides and squeeze them into a fist. Squeeze as hard as you possibly can. What happened to your entire body? It got tight! This is one of the hardest things for an athlete to realize when he lifts and squeezing the bar takes care of it. This simple maneuver is one of the easiest ways to combat a difficult problem. This is one of the first things I ever learned when I began lifting and can't believe that coaches leave this out. Squeezing the bar/dumbbell should happen on every set of every lift. If you are a coach and are not emphasizing this, I highly recommend you begin

2. Arch your upper back.

If you arch your upper back, and I mean as hard as you can, you will put your head, your low back and glutes in the proper position. This starting position is so important and by simply pulling your upper back together and arching you are taking care of a difficult problem very easily. Again, this will apply to most every lift and not just the squat.

3. Get your ass down:

Nothing is worse than walking into a Division I weight room and seeing a bunch of great athletes quarter squatting. The bar weight is too heavy for the athletes mid-section, their knees begin to buckle in and the potential for injury is as high as the coaches IQ is low. What a disgrace to the profession and how embarrassing for the administration and the coaches. How could they ever be so reckless and hire this strength coach? Also, it's a shame for the athletes that they are being exposed to such nonsense. Now you can argue with me about sitting back and spreading the floor...whatever, just get your ass down. The next question will be "Should I have my athletes squat to parallel or below?" If you are not box squatting, then have them go as low as possible because if you tell your athletes parallel then they will eventually start cutting their squats. Tell them to squat as low as possible and then come back up. It's that simple.

## **Seminar Squats**

**By Jim Wendler**

[www.elitefts.com/documents/Seminar\\_squats.htm](http://www.elitefts.com/documents/Seminar_squats.htm)

After being part of the Force Training Seminars for almost 2 years, Dave Tate and I have seen a wide variety of squat technique. Some of these techniques, and I am being polite here, are intriguing and always have us scratching our heads. There are several technical faults that are common to every seminar. Below is a list of these faults. If you cannot attend a seminar, I highly suggest that you purchase the Westside Seminar Videos, the Squat Workout Video or the Reactive Method Video. All three of these show proper squat form. After viewing these tapes, film yourself squatting and compare. You will quickly see what needs to be changed and what you are doing correctly. It wasn't until I received the Squat Workout Video, more than 3 years ago, that I realized I was going about it the wrong way. Do yourself a favor and focus on technique; don't get too wrapped up in band tension, percents, etc. Get your technique down and worry about the other things later. Developing bad squat form is easy. Correctly years of poor technique is one of the hardest things to do. That is why novices are so easy to teach; we don't have to correct years of motor learning.

1. Stance is too close. It is always a shock to people at the seminar to see how wide of a stance Dave and I take when doing our dynamic squats. Remember that the stance that we use during meets is closer than the one we use in training. Still the wide stance does wonders in building up your hip strength. If you think you need to move your stance out, I suggest that you start slowly by moving your feet out an inch on both sides. Also, in order to keep from straining your hips, you may have to use a slightly higher box during your warm-ups to ensure that your hips are warmed up. Wearing groove briefs or a squat suit will also help keep your hips healthy. Performing some kind of stretching, whether it be dynamic or static, can also help you box squat with a wide stance. Bottom line; most people do not take a wide enough stance on dynamic day. Do yourself and your squat a favor and use a wide stance. Not only will your hips become stronger but your squat will take off.
2. Flexing off of the box with the quads, not the hips. The easiest way to remedy this problem is by pushing your knees out and keeping the pressure on the sides of your shoes. You should not be on your heels or toes. By pushing your knees out (spreading the floor) you are ensuring a shorter bar path and thus a more efficient squat. Picture yourself on a Smith Machine (please, no comments); this is how straight of a bar path that you want. If you are not wearing a flat soled shoe, then the spreading the floor will be close to impossible.
3. Not pushing out with your abs. This is not a technique that is used just for those with a thick waist. If this was the case then Chuck Vogelpohl, who is as lean as they come, could not do this. The trick is to push out with your obliques and push out on the sides of your belt. If you want to practice this, have someone put their fingers on the sides of your abs. Try some bodyweight box squats and practice pushing out on their fingers. Do not allow them to "puncture" your abs. This is the sensation that you want. Also, when you take a breath to fill your stomach, your shoulders should not rise. If they do, then you do not know how to breathe when you squat. Your stomach should expand; your shoulders should not rise.
4. Not keeping your arch. This is one of the keys to a big squat. Being able to hold a tight arch is essential in maintaining the proper position while squatting. This is a very uncomfortable position and it should be noted that squatting is not a comfortable exercise.
5. Weak posterior chain. This is something we all fall victim to. How strong is strong enough? I'll let you know when I figure it out. Simply put, never stop training your low back, hamstrings, glutes, lats and upper back. Hit your posterior chain with a wide variety of effective exercises such as glute ham raises, Reverse Hyperextensions, back raises, pull throughs, Romanian deadlifts, Dimel deadlifts, good mornings (of all varieties), various lat and upper back exercises, sled dragging (of all varieties) and any other exercises that you think can build your squat.
6. Learning how to sit back and down. Your squat form on a box should mirror your free squat form. While many people have a tough time sitting back during a squat we have also seen many times people sit back too far on a box. This does not translate into a meet squat. These people need to learn to sit back and down.
7. Keeping the elbows tucked. When lifters keep their elbows tucked, or at least attempt to keep them tucked, they will virtually eliminate the tendency to fall forward during a squat. By keeping the elbows tucked underneath the bar (or close to it) then they will also keep the bar in the correct path and ensure that their hips will be under them when they squat. When I see a lifter's elbows flared out and back, they will undoubtedly fall forward. Their butts will also come up first and thus lose hip power and place unneeded stress on their low backs. Believe me, this is what happened to me at my last meet.

## **To the Critics**

**By Jim Wendler**

[www.elitefts.com/documents/to\\_the\\_critics.htm](http://www.elitefts.com/documents/to_the_critics.htm)

Being a part of Elite Fitness Systems for the past couple of years as well as powerlifting and competitive sports, I have been exposed to a lot of critics telling me what I'm doing is wrong or, in the case of football, what the team is doing wrong. The interesting thing is that after they espouse their wisdom, rarely do they have an answer. They are very good at pointing out what is wrong, but can never tell you what to do to correct it. And if they do attempt to give you advice, you can only shake your head because it is so retarded and back-ass-ward you wonder how they've lived as long as they've had without falling into a glacier.

For the first ¼ of my training career, I would fight these critics and give examples and answers and try to change their minds. Man, what a waste of time and energy. Or, and I'm not proud of this, I would see someone doing something in the weight room that I thought was wrong, and give them advice even though they didn't ask for it. I thought I was doing them a favor when in reality I was becoming someone that I hated. These were dark days in my life and I'm not proud. But we all learn and move on.

But I do realize that some of us like to be challenged a bit by the critics and give them a good fight. We all have to go through the phase of being the "Defenders of the Iron" or whatever kind of Marvel-esque name you wish to give yourself. So here are some common things that people seem to want to argue about when discussing powerlifting or weight training in general.

Weight lifting stunts your growth: This belief is usually heard around the Thanksgiving table by Uncle Joe (currently 5'11" 168lbs and somehow has a gut) who's training experience amounts to stubbing his toe on a 45lbs plate while cutting through his high school weight room to get to track practice. Of course track was the only sport he ever participated in because no one ever gets cut. Anyway, Uncle Joe gives examples such as "the short dude from the Olympics" (Naim Suleymanoglu) or some bodybuilders he saw on T.V. that are 5' 8" or "the kid down the street". While improper weight training can hurt a young kid, improper training can hurt an adult. Furthermore, the critics never seem to realize that the ones that succeed in sports are usually genetically gifted towards their given sport. Those that are very successful in weightlifting, powerlifting and bodybuilding (those in the spotlight) are generally shorter people whose bodies are suited for the sport. Using the critics' argument, one would say that basketball causes people to be taller. For the most part, your body will choose your sport. That's why you don't see many 300lbs men with huge ankles and wrists playing soccer.

Powerlifters have awful technique in the squat, bench and deadlift: This one is probably one of the dumbest arguments I have ever heard because all it takes is 5 minutes of thinking to come up with the correct answer. Just so we are all on the same page let me explain powerlifting; the goal is to lift the most you can in the bench, squat and deadlift. You cannot do this if you are hurt. So you must learn how to lift the most weight possible and NOT get hurt. Is everyone following me? So who do you think will know the proper way to squat? Richard Squats-a-Little who squats 135 for a couple easy sets of 5 or Johnny No-Neck who squats a 1000lbs. and knows that if he gets out of the groove by an INCH may hurt, cripple or even kill himself? Who do you think is going to go out of his way to make sure his form is accurate?

Bench shirts are cheating: Cheating at what? Last time I looked is that the bench shirt is legal in every federation unless you compete in the IPTA (International Pec Tear Association). But the local Gold Gym Warrior will always point to something as to why he is so much weaker than powerlifters. Then you'll have the old school lifters complain about records being broken and how it's all about the shirt, blah, blah, blah... It's like listening to a bunch of old women bitching and moaning about the prices at the grocery store. No one cares what you say and times change. But if the shirt is legal, then how is it cheating? Is it cheating if you wear a helmet in football? And to those that say, "Well, how much can you bench without a shirt?" To them I say, "I don't care. I'm not judged by what I bench without a shirt. Would you ask a kicker who far he could kick without a tee? Or how far a baseball player could hit a ball without a bat?" I don't know if it was Sebastian Burns who said it, but I'll give him credit for this statement after being asked what he gets out of his bench shirt, "720lbs." At the time this was his max.

Powerlifters should get paid like every other athlete: I've heard this a million times and still can't understand the logic behind this argument. You know who pays for the salaries of professional basketball, football and baseball players? The fan does. You know how many people watch these sports? Millions. Now go to a powerlifting meet and see how many people show up. But then I've heard this argument, "Powerlifters work just as hard as other athletes." The last time I heard this gem was when I was in driving past a construction site. I asked him if he thought that the construction workers didn't work hard, or if teachers didn't work hard or if a dental hygienist didn't work hard. What about the salesman that's on the road 40 weeks out of the year to help feed his family and isn't home to see his children grow up? What about people that build houses? Isn't that an important job that deserves better pay? If you want to make some money from powerlifting then by all means, have at it. But don't complain that you're not making a million dollars a year; we are not entitled to money because someone else has more than we do.

Squatting with a wide stance is not sport specific: Again, I have no understanding of this statement and just a tiny bit of thought can answer this question. Have any well coached athlete get into his or her stance. For example, have a baseball player get into a stance as if he were playing shortstop;

have a volleyball player get into a stance as if to receive an opponent's serve; have a football player get into a stance as if playing linebacker. They are all pretty much the same. The toes are slightly turned out and the stance is always slightly wider than shoulder width. If they are in a narrow or Olympic squat stance, I would love to see how many grass stains are on the back of their jersey! And what the hell is sport specific really? A basketball player will jump for a rebound with a variety of different stances. He cannot be in the exact same stance every time. The speed of the game won't allow him to set up perfectly each time. So what is he supposed to do, squat with 10 different kinds of stances? The goal of the weight coach or weight room is to make the athlete stronger in his sport. It's the job of the field coach to take the strength and apply it. If you really want sport specific, then all football players should lift with all of their equipment on and with people trying to tackle them when they squat.

The SAT is prejudice: Off topic, but as a friend of mine once said, "The SAT is prejudice? Yeah, prejudice against stupid people."

Box squats are bad for the back: I hear this all of the time but am reminded of a famous quote by Meg Ritchie, former strength and conditioning coach at the University of Arizona. "There are no dangerous lifts, just dangerous coaches." I've seen very bad box squats and I've seen very good box squats. I've also seen really awful bench pressing but no one is battling that exercise. When people tell you that box squats are bad for the back ask them to show you the evidence. Since THEY attacked box squats, THEY should provide you with the information. Not the other way around. Also, if you are a coach and are using the box squat, please do us all a favor and learn how to do it and learn how to COACH it. You'd be saving everyone a lot of headaches and time if this were followed.

Bodybuilding and bodybuilding magazines have killed strength training in the United States: I call this excuse the "Columbine High School Principle" or simply blaming others rather than taking responsibility. After the tragedies in Columbine, Ted Koppel and the pet mongoose he wears on his head visited the Colorado city and televised a town-hall meeting to discuss what happened, why, etc. During the telecast, one gentleman stands up and states that we should put the blame on who is really responsible for the acts. Of course, for a moment I thought he was going to blame the young men who actually shot the students and teachers. But this man stands up and proudly exclaims, "Marilyn Manson!" I about pissed myself. Mr. Manson didn't pull any triggers, nor did he tell anyone to do it. Blaming bodybuilding and their print fodder is such a retarded excuse. It's not the bodybuilders and Flex magazines fault. It's those that interpret it and apply it. So don't be one of those bandwagon jumpers that want to blame everything on Ronnie Coleman and Arnold. At least they came up with their own training style and found out what works for them.

Strength is not important: This is something that Dave Tate has brought up time and time again and I'm not afraid to take his idea and run with it. When I first started to lift weights I was a thin and slow kid in 8th grade. I was an above average athlete, but not very fast. After lifting for 6 months (squatting, benching and deadlifting) track season came around and I had now become the fastest kid in the school. I remember thinking that the reason I was so much faster than everyone was because I was stronger. Now I am not a genius, but how the hell could a 13 year kid with no fancy degrees figure this out but it remains a mystery to some of the strength coaches? Of course these coaches will argue that "we are not powerlifters, we are athletes." No one ever argued that fact, but then why do you test in the bench and squat? They will counter that they have no need for a 600lbs bench press. They're right! They don't need one, but it sure would be nice to have every offensive lineman on a college team able to bench press 400lbs and squat 600lbs. Hell, wouldn't it be nice if they could even all squat 400? Because I KNOW that most schools can't even say that! And I'm talking about a parallel squat, not a ¼ squat piece of crap. Whenever I hear these kinds of statements it's from a coach that has weak athletes. Just strive to make them stronger. Make the 200lbs squatter into a 315lbs squatter and you will be surprised at what will happen. Also, to those that believe and preach nothing but stability balls and balance boards. I bet you can teach me how to stand on a stability ball and wave a wand in a few hours. How long do you think it is going to take me to teach you how to squat over 900lbs? You know why no one likes to hear this? Because getting stronger takes hard work and effort.

Ok, now I feel a little bit better. Sometimes I have to get these things off of my chest and I hope I've given the "Defenders of the Iron" some good ammo against those that want to battle you in your quest for strength. But do yourself a favor. Save your breath for your heavy lifts; nothing says "FU" like a big lift.

## **Box Squatting**

**By Louie Simmons**

[www.deepsquatter.com/strength/archives/ls9.htm](http://www.deepsquatter.com/strength/archives/ls9.htm)

Box squatting is the most effective method to produce a first-rate squat. This is, in my opinion, the safest way to squat because you don't use as much weight as you would with a regular squat.

Let me say first that, no, they won't hurt your spine, you don't use 1000 lbs. on a 25 inch tall box, you don't rock on the box, you don't touch and go, and there is no need to do regular power squats before a meet. No knee wraps are worn nor are the straps of the suit pulled up.

By doing sets of 2 reps for at least 8 sets with short rest periods, you will get about a 200 lb. carryover to your regular squat. Two of our lifters finished their lifting cycle before a meet with 8 sets of 2 reps with 505 lbs. off a slightly below parallel box, and both squatted 700 for a meet PR. One was competing in the 242s and the other as a 275. Two years before, in his first meet, our 275 pounder squatted 465 - quite an improvement!

There are many advantages to box squatting. One of the most important is recuperation. You can train more often on a box than you can doing regular squats. The original Westside boys (Culver City, CA) did them three times a week, which I feel is a bit extreme, but they paved the way for this type of training. We do them for the squat part of our workout on Fridays and occasionally on Mondays to build hip and low back power for deadlifting. The NBA's Utah Jazz do box squats for the same reason - recuperation. Greg Shepherd, their strength coach, is a former member of the Culver City gym.

The second reason is equally important. It is generally accepted that you should keep your shins perpendicular to the floor when squatting. With box squatting, you can go past this point (that is, an imaginary line drawn from your ankle to your knee will point toward your body), which places all the stress on the major squatting muscles- hips, glutes, lower back, and hamstrings. This is a tremendous advantage.

Thirdly, you don't have to ask anyone if you were parallel. Once you establish a below parallel height, all of your squats will be just that -below parallel. I have seen it over and over. As the weights get heavier, the squats get higher. This can't happen with box squats.

If your hips are weak, use a below parallel box with a wide stance. If you need low back power, use a close stance, below parallel. If your quads are weak, work on a parallel box. If you have a sticking point about 2 inches above parallel, as is common, then work on a box that is 2 inches above parallel. Our advanced squatters use all below parallel boxes. This builds so much power out of the hole that there will be no sticking points.

As an added bonus, box squats will build the deadlift as well by overloading the hips and lower back muscles. Your ability to explode off the floor will increase greatly. One of our 275 pounders, Jerry Obradovich, put 50 lbs. on his dead lift in 3 months by doing extra box squats during that time period, going from 672 to 722 at the 1994 APF Junior Nationals. Chuck Vogelpohl deadlifts only about once in 8 weeks yet pulls 793 in the 242s. Chuck relies on wide box squats on a low, 12-inch box and does a lot of reverse hypers and chest-supported rows.

Now, how do you do a box squat? They are performed just like regular squats. Fill your abdomen with air, and push out against your belt. Push your knees out as far as possible to the sides and with a tightly arched back, squat back, not down, until you completely sit on the box. Every muscle is kept tight while on the box with the exception of the hip flexors. By releasing and then contracting the hip flexors and arching the upper back, you will jump off the box, building tremendous starting strength. Remember to sit back and down, not straight down. Your hamstrings will be strengthened to a high degree, which is essential. Many don't know this, but the hamstrings are hip extensors. Some great squatters have large quads and some do not, but they all have large hamstrings where they tie into the glutes. Remember to sit on the box completely and flex off.

Now, how do you know how much you can full squat if you box squat all the time? Well, let's say you have squatted 600 lbs. in a meet and decided to box squat. Let's say you can do 550 off a parallel box; that's a 50-lb. carry-over. Now you are doing only box squats and you take a weight 4-6 weeks



into the cycle. You hit a 575 squat, a 25-lb. jump on that particular box. This will carry over to your 600 contest best. So now expect a 625 at your next meet.

I recommend that you train with 65-82% of your box record on each particular box height that you use. Change box heights every 3-4 weeks. Do not base the training weight on your full squat record! Box squats are much harder than full squats! Do 8-12 sets of 2 reps with 1 minute rest between sets. This is a tough workout! The week that you reach 82%, reduce the sets to 6. Don't train with more than 82%. You can try a max the after you train with 82%. If you are going to a meet, take a weight 2 weeks before the meet. The week before the meet use 70% for 6-8 sets.

This type of squatting is hard work, but each rep shouldn't be hard. Don't get psyched up to do your sets. We have found that 2 reps is ideal because any more may cause bicipital tendonitis and if you are doing 12 sets, you are doing 12 first reps per workout. After all, the first rep is the most important one. This will make your contest squat much better. Our most talented lifters will do best on their first rep and then tire quickly whereas our lower skilled people will do better after the first rep is completed because they use the first rep as a body awareness tool. As they become more skilled, their first rep will be their best.

I know box squatting is not common, mostly because no one knows how do them. After reading this or watching my squat tape you should be fully aware of the benefits. Many great squatters have done box squats including Marv Phillips, Larry Kidney, Roger Estep, Matt Dimel, and of course George Fern, who did an 853 squat in track shorts in 1970. If box squats didn't work, we wouldn't do them. We have 20 lifters who have squatted over 700 lbs. in a meet including a 198 who has done 804. I hope this article clears up any misconceptions and leads to great success on the lifting platform.

Dr. Kurt A. Moosburger, im Oktober 2005 (aktualisiert Juni 2008)